



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,728	12/29/2001	Joseph Zeck	DCI-19C	4116

21833 7590 06/13/2003

BOULDER PATENT SERVICE INC
1021 GAPTER ROAD
BOULDER, CO 803032924

EXAMINER

FULLER, ERIC B

ART UNIT	PAPER NUMBER
----------	--------------

1762

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/040,728

Applicant(s)

ZECK ET AL.

Examiner

Eric B Fuller

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1762

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eslambolchi et al. (US 6,294,022 B1) in view of Peterman (US 4,387,340) and further in view of Rodgers et al. (US 6,064,940).

Eslambolchi teaches a hand-held apparatus that produces a spray painted mark on the ground to identify locations that have buried cables. The reference fails to teach how the buried cables are located.

Peterman teaches a hand-held apparatus that is used to detect buried cables by measuring the electromagnetic signal that it releases (column 2, lines 35-45). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use this apparatus to detect buried cables prior to paint marking the ground. By doing so, one would reap the benefits of accurately marking the ground in the required locations.

The combined references fail to teach the configuration of the two elements (marking and detection) into one apparatus. However, Rodgers teaches an apparatus that has both detecting means and marking means located on the same apparatus that

Art Unit: 1762

has the benefits of being able to be used by laborers of minimal training (column 1, lines 54-67) and additional obvious benefits of not requiring the operator to carry two separate devices. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to supply the detection and marking means taught by Eslambolchi and Peterman as a single apparatus. By doing so, the detection and marking may be performed by a laborer with minimal training and/or without the need to carry two separate apparatuses.

Additionally, it is noted that the courts have held that making separate elements integral is obvious, see *Nerwin v. Erlichman* 168 USPQ 177 (PO BdPatApp 1969); *In re Wolfe* 116 USPQ 443 (CCPA 1958); *In re Howard* 150 US 164 (USSC 1893).

As to claims 2 and 3, Eslambolchi teaches that the supply of paint is from spray paint cans (column 2, lines 20-34). It would be obvious that the cans are replaceable.

As to claim 4, figure 1 of Eslambolchi shows that the operator is in the upright position.

As to claims 5 and 6, the apparatus of Eslambolchi teaches finger activation of the spray paints or any other suitable type activation (column 1, lines 50-59). To use foot activation means would have been equally obvious with the expectation of achieving similar results.

The limitations to claims 7, 8, and 9 have previously been addressed in this Office Action.

As to claims 10-14, Rodgers teaches a battery-powered solenoid that is used to activate the spray mechanism (column 4, lines 8-15). It would have been obvious to

Art Unit: 1762

one of ordinary skill to couple a solenoid to the spray mechanism of Eslambolchi in order to perform the marking properly.

Also to claim 14, to use a battery to power the electronic components of Peterman would have been obvious in order to reap the benefits of having the apparatus be portable.

The limitations of claims 15 and 16 have been previously addressed in this Office Action.

As to claims 17-19, the LCD screen taught by Rodgers monitors many parameters of the process. It would have been obvious to one skilled in the art to use such an LCD screen to monitor the actuations of the apparatus taught by Eslambolchi in view of Peterman. Specifically to claim 19, it is the position of the examiner, absence evidence of criticality, that the exact switching pattern used by the operator to initiate marking is one of design.

The limitations of claims 20-22 and 31 have been previously addressed in this Office Action. Additionally, to use a housing arrangement similar to that of Rodgers would have been obvious with the expectation of success, as Rodgers provides means of having marking and locating devices provided on one apparatus. Figures 2 and 3 of Rodgers shows a hinge connected to both mechanisms (locator and marking device) of the apparatus (13). The apparatus is collapsible for easy storage. The first and second portions are moved relative to the handle when being collapsed.

The limitations of claims 23-30 and 32-37 have been previously addressed in this Office Action.

Art Unit: 1762

The limitations of claims 32-38 have been previously addressed in this Office Action.

Response to Arguments

Applicant argues that the examiner has combined Eslambolchi with Peterson for reasons different than that of the present invention. It is additionally argued that Peterson does not provide a teaching that allows for more accurate marking. This is not found convincing.

In response to applicant's argument that there is a different reason for combining, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In response to applicant's argument that there is no suggestion to combine the references (i.e. Peterson fails to teach that the locating method provides the ability to mark accurately), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Eslambolchi teaches a marking method, but does not disclose any means for locating the buried

Art Unit: 1762

cables. Peterson teaches a means for locating the cables. Therefore, to use the method of Peterson to locate the buried cables would be more accurate than the lack of method taught by Eslambolchi. This benefit flows naturally from the references. Since Eslambolchi provides no means for locating the cable in which it desires to mark, one would obviously look for a way in which this would be done.

Applicant has argued the combination of the references Eslambolchi in view of Peterson in further view of Rodgers. The applicant has taken it upon himself to assume that Rodgers is the primary reference and has argued the claims with respect to this. The arguments are not found convincing, as they pertain to Rodgers in view of Eslambolchi and Peterson, and not the rejection of record. The examiner has used Rodgers as providing that it is known, and obvious, to combine devices of marking (Eslambolchi) with devices of locating (Peterson). Although Rodgers teaches locating means that do not detect underground cables, the benefits of combining marking and locating devices are still realized. Additional features of Rodgers have been used for the dependent claims, as they would have been obvious for apparatuses that have marking and locating devices in them.

Conclusion

Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B Fuller whose telephone number is (703) 308-6544. The examiner can normally be reached Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck, can be reached at (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



EBF
June 11, 2003



SHRIVE P. BECK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700